

**Patent claims**

1. An axial-flow thermal turbomachine, having a rotor (1) made from a metallic material with a first density ( $D_1$ ), in which rotor blades (3, 3') and intermediate pieces (4) are mounted alternately in a circumferential groove, characterized in that said intermediate pieces (4) consist of a material with a second density ( $D_2$ ), which is lower than the first density ( $D_1$ ).
2. The turbomachine as claimed in claim 1, characterized in that the material having the second density ( $D_2$ ) is an intermetallic compound.
3. The turbomachine as claimed in claim 2, characterized in that the intermetallic compound is a  $\gamma$ -titanium aluminide alloy or an orthorhombic titanium aluminide alloy.
4. The turbomachine as claimed in claim 3, characterized in that the  $\gamma$ -titanium aluminide alloy has the following chemical composition (details in % by weight): Ti-(30.5-31.5)Al-(8.9-9.5)W-(0.3-0.4)Si.
5. The turbomachine as claimed in claim 1, characterized in that the material having the second density ( $D_2$ ) is a titanium alloy.
6. The turbomachine as claimed in one of claims 1 to 5, characterized in that the turbomachine is a high-pressure compressor of a gas turbine having a rotor (1) which substantially comprises a stainless Cr-Ni steel.